

0570
10/2

OIEP

#2

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:19

Input Set : N:\Crf3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw

5 <110> APPLICANT: SPEAR, Patricia G.
 7 MONTGOMERY, Rebecca I.
 11 <120> TITLE OF INVENTION: HERPES VIRUS ENTRY RECEPTOR PROTEIN
 15 <130> FILE REFERENCE: 0290-1
 19 <140> CURRENT APPLICATION NUMBER: 09/924,231
 21 <141> CURRENT FILING DATE: 2001-08-08
 23 <150> PRIOR APPLICATION NUMBER: 09/333,279
 25 <151> PRIOR FILING DATE: 1999-06-15
 29 <160> NUMBER OF SEQ ID NOS: 7
 33 <170> SOFTWARE: PatentIn Ver. 2.0
 37 <210> SEQ ID NO: 1
 39 <211> LENGTH: 1724
 41 <212> TYPE: DNA
 43 <213> ORGANISM: Homo sapiens
 47 <400> SEQUENCE: 1

ENTERED

49 ccttcataacc ggccttcccc ctcggctttg cctggacagc tcttgccctcc cgcagggccc 60
 51 acctgtgtcc cccagcgccg ctccacccag caggcctgag cccctctctg ctgccagaca 120
 53 cccctgtctg cccactctcc tgctgtctcg gtcttgaggc acagcttgtc acaccgaggc 180
 55 ggattctctt tctctttctc ttctggccca cagccgcagc aatggcgctg agttcctctg 240
 57 ctggagttca tcctgctagc tgggttcccc agctgccggt ctgagcctga ggcatggagc 300
 59 ctccctggaga ctgggggcct cctccctgga gatccacccc cagaaccgac gtcttgaggc 360
 61 tgggtgctgta tctcaccttc ctgggagccc cctgctacgc cccagctctg ccgtcctgca 420
 63 aggaggacga gtacccagtg ggctccgagt gctgccccaa gtgcagtcca gggtatctgt 480
 65 tgaaggaggc ctgcggggag ctgacgggca cagtgtgtga accctgccct ccaggcacct 540
 67 acattgcccc cctcaatggc ctaagcaagt gtctgcagtg ccaaagtgtg gaccagcca 600
 69 tgggcctgcg cgcgagccgg aactgctcca ggacagagaa cgccgtgtgt ggctgcagcc 660
 71 caggccaactt ctgcatcgtc caggacgggg accactgcgc cgcgtgccgc gcttacgcca 720
 73 cctccagccc gggccagagg gtgcagaagg gaggcaccga gagtcaggac accctgtgtc 780
 75 agaactgccc cccggggacc ttctctccca atgggaccct ggaggaatgt cagcaccaga 840
 77 ccaagtgcag ctggctggtg acgaaggccg gagctgggac cagcagctcc cactgggtat 900
 79 ggtggtttct ctcagggagc ctcgctatcg tcattgtttg ctccacagtt ggctaataca 960
 81 tatgtgtgaa aagaagaaa ccaaggggtg atgtagtcaa ggtgatcgtc tccgtccagc 1020
 83 ggaaaagaca ggaggcagaa ggtgaggcca cagtcattga ggccctgcag gccctccgg 1080
 85 acgtcaccac ggtggccgtg gaggagacaa taccctcatt cacggggagg agcccaaacc 1140
 87 actgacccac agactctgca ccccgacgcc agagatacct ggagcgacgg ctgctgaaag 1200
 89 aggtgttcca cctggcgaaa ccaccggagc ccggaggctt gggggctccg ccctgggctg 1260
 91 gcttccgtct cctccagtgg agggagaggt ggggcccctg ctggggtaga gctggggacg 1320
 93 ccacgtgcca ttcccatggg ccagtgaagg cctggggcct ctgttctgct gtggcctgag 1380
 95 ctccccagag tcctgaggag gagcgccagt tgcccctcgc tcacagacca cacaccagc 1440
 97 cctcctgggc cagcccagag ggcccttcag accccagctg tctgcgcgtc tgactcttgt 1500
 99 ggccctcagca ggacaggccc cgggcactgc ctacagacca aggtctgact ggggtggctg 1560
 101 cagtgtggtg tttagtggat accacatcgg aagtgtttt cttaaattgga tttgaattcc 1620
 103 ggtcctgtct tctatttgtc atgaaacagt gtatttgggg agatgctgtg ggaggatgta 1680
 105 aatatcttgt ttctcctcaa aaaaaaaaaa aaaaaaaaaa aaaa 1724
 109 <210> SEQ ID NO: 2
 111 <211> LENGTH: 283
 113 <212> TYPE: PRT

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:19

Input Set : N:\Crf3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw

```

115 <213> ORGANISM: Homo sapiens
119 <400> SEQUENCE: 2
121 Met Glu Pro Pro Gly Asp Trp Gly Pro Pro Pro Trp Arg Ser Thr Pro
123   1           5           10           15
127 Arg Thr Asp Val Leu Arg Leu Val Leu Tyr Leu Thr Phe Leu Gly Ala
129           20           25           30
133 Pro Cys Tyr Ala Pro Ala Leu Pro Ser Cys Lys Glu Asp Glu Tyr Pro
135           35           40           45
139 Val Gly Ser Glu Cys Cys Pro Lys Cys Ser Pro Gly Tyr Arg Val Lys
141           50           55           60
145 Glu Ala Cys Gly Glu Leu Thr Gly Thr Val Cys Glu Pro Cys Pro Pro
147  65           70           75           80
151 Gly Thr Tyr Ile Ala His Leu Asn Gly Leu Ser Lys Cys Leu Gln Cys
153           85           90           95
157 Gln Met Cys Asp Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser
159           100          105          110
163 Arg Thr Glu Asn Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys Ile
165           115          120          125
169 Val Gln Asp Gly Asp His Cys Ala Ala Cys Arg Ala Tyr Ala Thr Ser
171           130          135          140
175 Ser Pro Gly Gln Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr
177 145          150          155          160
181 Leu Cys Gln Asn Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu
183           165          170          175
187 Glu Glu Cys Gln His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala
189           180          185          190
193 Gly Ala Gly Thr Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly
195           195          200          205
199 Ser Leu Val Ile Val Ile Val Cys Ser Thr Val Gly Leu Ile Ile Cys
201           210          215          220
205 Val Lys Arg Arg Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser
207 225          230          235          240
211 Val Gln Arg Lys Arg Gln Glu Ala Glu Gly Glu Ala Thr Val Ile Glu
213           245          250          255
217 Ala Leu Gln Ala Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr
219           260          265          270
223 Ile Pro Ser Phe Thr Gly Arg Ser Pro Asn His
225           275          280
231 <210> SEQ ID NO: 3
233 <211> LENGTH: 21
235 <212> TYPE: DNA
237 <213> ORGANISM: Homo sapiens
241 <400> SEQUENCE: 3
243 aaccgggctc gagcgggccgc t
247 <210> SEQ ID NO: 4
249 <211> LENGTH: 22
251 <212> TYPE: DNA
253 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 4

```

21

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:19

Input Set : N:\Crf3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw

```

259 gaattccacc acacttaagg tg 22
263 <210> SEQ ID NO: 5
265 <211> LENGTH: 19
267 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
273 <400> SEQUENCE: 5
275 acaagaccgt tgcaccctc 19
279 <210> SEQ ID NO: 6
281 <211> LENGTH: 4622
283 <212> TYPE: DNA
285 <213> ORGANISM: Homo sapiens
289 <400> SEQUENCE: 6
291 aagcttgcat gcctgcaggt cgactctagc tgggttcccc agctgccggt ctgagcctga 60
293 ggcattggagc ctccctggaga ctgggggcct cctccctgga gatccacccc cagaaccgac 120
295 gtcttgaggc tgggtgctgta tctcaccttc ctgggagccc cctgctacgc ccagctctg 180
297 ccgtcctgca aggaggacga gtaccacagt ggctccgagt gctgccccaa gtgcagtcca 240
299 gggttatcgtg tgaaggaggc ctgcggggag ctgacgggca cagtgtgtga accctgccct 300
301 ccaggcacct acattgcccc cctcaatggc ctaagcaagt gtctgcagtg ccaaattgtg 360
303 gaccagacca tgggcctgcg cgcgagccgg aactgctcca ggacagagaa cgccgtgtgt 420
305 ggctgcagcc caggccactt ctgcatcgtc caggacgggg accactgctc cgctgcccgc 480
307 gcttacgcca cctccagccc gggccagagg gtgcagaagg gaggcaccga gagtccaggc 540
309 accctgtgtc agaactgccc cccgggggacc ttctctccca atgggaccct ggaggaaatg 600
311 cagcaccaga ccaagtgcag aattcacaag accgttgac cctcgacatg cagcaagccc 660
313 acgtgcccac cccctgaaact cctgggggga ccgtctgtct tcattctccc cccaaaaccc 720
315 aaggacaccc tcatgatctc acgcaccccc gaggtcacat gcgtggtggt ggacgtgagc 780
317 caggatgacc ccgagggtgca gttcacatgg tacataaaca acgagcaggt gcgcaccgac 840
319 cggccgcccgc tacgggagca gcagttcaac agcacgatcc gcgtggtcag caccctcccc 900
321 atcacgcacc aggactggct gaggggcaag gaggttcaagt gcaaagtcca caacaaggca 960
323 ctcccgcccc ccattcgagaa aacctctcc aaagccagag ggcagcccct ggagccgaag 1020
325 gtctacacca tgggccctcc ccgggaggag ctgagcagca ggtcggtcag cctgacctgc 1080
327 atgatcaacg gcttctaccc ttccgacatc tcgggtggagt gggagaagaa cgggaaggca 1140
329 gaggacaact acaagaccac gccggccgtg ctggacagcg acggctccta ctctctctac 1200
331 aacaagctct cagtgcaccac gagtgcagtg cagcggggcg acgtcttcac ctgctccgtg 1260
333 atgcacgagg ccttgacaaa ccactacacg cagaagtcca tctcccgtc tccgggtaaa 1320
335 tgagcgctgt gccggcgagc tgcccctctc cctccccccc acgccgcagc tgtgcacccc 1380
337 gcacacaaat aaagcaccca gctctgccct gaacagcttc cgtctccct atagtgcagc 1440
339 gtattaattt cgataagcca gctgcattaa tgaatcggcc aacgcgcggg gagaggcggg 1500
341 ttgcgtattg ggcgctcttc cgcttccctc ctactgact cgtgcgctc ggtcgttcgg 1560
343 ctgcggcgag cggtatcagc tcaactaaa gcggtaatat ggttatccac agaatcaggg 1620
345 gataacgcag gaaagaacat gtgagcaaaa ggccagcaaa aggccaggaa ccgtaaaaag 1680
347 gccgcgttgc tggcgttttt ccattaggtc cgccccctg acgagcatca caaaaatcga 1740
349 cgctcaagtc agagggtggcg aaacccgaca ggactataaa gataccaggc gtttccccct 1800
351 ggaagctccc tcgtgcgctc tcctgttccg accctgccgc ttaccggata cctgtccgcc 1860
353 tttctccctt cgggaagcgt ggcgctttct catagctcac gctgtaggta tctcagttcg 1920
355 gtgtaggctg ttgcgtccaa gctgggctgt gtgcacgaac ccccgttca gcccgaccgc 1980
357 tgcgccttat ccggtaaacta tcgtcttgag tccaacccgg taagacacga cttatcgcca 2040
359 ctggcagcag ccactggtaa caggattagc agagcgaggt atgtaggcgg tgctacagag 2100
361 ttcttgaaat ggtggcctaa ctacggctac actagaagga cagtatttgg tatctgcgct 2160
363 ctgctgaagc cagttacctt cggaaaaaga gttggtagct cttgatccgg caaacaacc 2220

```

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:19

Input Set : N:\Crif3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw

```

365 accgctggta gcggtggttt ttttgtttgc aagcagcaga ttacgcgcag aaaaaaagga 2280
367 tctcaagaag atcctttgat cttttctacg gggctcgacg ctcaagtggaa cgaaaaactca 2340
369 cgtaagggga ttttgggtcat gagattatca aaaaggatct tcacctagat ctttttaaat 2400
371 taaaaatgaa gttttaaatc aatctaaaagt atatatgagt aaacttggtc tgacagttac 2460
373 caatgcttaa tcagtggaggc acctatctca gcgatctgtc tatttcgttc atccatagtt 2520
375 gcctgactcc ccgtcgtgta gataactacg atacgggagg gcttaccatc tggccccagt 2580
377 gctgcaatga taccgcgaga cccacgctca ccggctccag atttatcagc aataaaccag 2640
379 ccagccggaa gggccgagcg cagaagtggc cctgcaactt tatccgcctc catccagtct 2700
381 attaatgttt gccgggaagc tagagtaagt agttcgccag ttaatagttt gcgcaacggt 2760
383 gttgccattg ctacagccat cgtggtgtca cgctcgtcgt ttggtatggc ttcattcagc 2820
385 tccggttccc aacgatcaag gcgagttaca tgatcccca tgttggtgcaa aaaagcgggt 2880
387 agctccttcg gtccctccgat cgttgctcaga agtaagtggg ccgcagtggt atcactcatg 2940
389 gttatggcag cactgcataa ttctcttact gtcatgccat ccgtaagatg cttttctgtg 3000
391 actggtgagt actcaaccaa gtcattctga gaatagtgtg tcgcgcgacc gagttgctct 3060
393 tgcccgcgct caatacggga taataccgcg ccacatagca gaactttaaa agtgctcatc 3120
395 attgaaaaac gttcttcggg gcgaaaaactc tcaaggatct taccgctgtt gagatccagt 3180
397 tcgatgtaac ccactcgtgc acccaactga tcttcagcat cttttacttt caccagcgtt 3240
399 tctgggtgag caaaaacagg aaggcaaaat gccgcaaaaa agggaataag ggcgacacgg 3300
401 aaatgttgaa tactcatact cttccttttt caatatattt gaagcattta tcagggttat 3360
403 tgtctcatga gcggatacat atttgaatgt atttagaaaa ataaacaaat aggggttccg 3420
405 cgcacatttc cccgaaaagt gccacctgac gtctaagaaa ccattattat catgacatta 3480
407 acctataaaa ataggcgtat cacgaggccc ttctgtctcg cgcgtttcgg tgatgacggg 3540
409 gaaaacctct gacacatgca gctcccggag acggtcacag cttgtctgta agcggatgcc 3600
411 gggagcagac aagcccgtca gggcgcgctc gcgggtgttg gcgggtgtcg gggctggctt 3660
413 aactatgcgg catcagagca gattgtactg agagtgcacc atatcgacgc tctcccttat 3720
415 gcgactcctg cattaggaag cagcccagta gtaggttgag gccgttgagc accgcccggc 3780
417 caaggaatgg tgcaaggaga tggcgcccaa cagtcccccg gccacggggc ctgcccaccat 3840
419 acccagccg aaacaagcgc tcatgagccc gaagtggcga gcccgatctt ccccatcggg 3900
421 gatgtccggc atatagcgcg cagcaaacgc acctgtggcg ccggtgatgc cggccacgat 3960
423 gcgtccggcg tagaggatct ggctagtatt taatagtaat caattacggg gtcattagtt 4020
425 catagcccat atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga 4080
427 ccgcccacg acccccggcc attgacgtca ataatgacgt atgttcccat agtaacgcca 4140
429 atagggactt tccattgacg tcaatgggtg gactatttac ggtaaaactgc ccacttggca 4200
431 gtacatcaag tgtatcatat gccaaagtac ccccctattg acgtcaatga cggtaaatgg 4260
433 cccgcctggc attatgcca gtacatgacc ttatgggact ttctacttg gcagtacatc 4320
435 tacgtattag tcatcgctat taccatgggt atgcggtttt ggcagtacat caatgggctg 4380
437 ggatagcggg ttgactcacg gggatttcca agtctccacc ccattgacgt caatgggagt 4440
439 ttgttttggc accaaaaatca acgggacttt ccaaaatgtc gtaacaactc cgccccattg 4500
441 acgcaaatgg gcggtaggcg tgtacgggtg gaggtctata taagcagagc tctctggcta 4560
443 actagagaac ccactgctta actggcttat cgaaattaat acgactcact atagggagac 4620
445 cc 4622

```

449 <210> SEQ ID NO: 7

451 <211> LENGTH: 419

453 <212> TYPE: PRT

455 <213> ORGANISM: Homo sapiens

459 <400> SEQUENCE: 7

461 Met Glu Pro Pro Gly Asp Trp Gly Pro Pro Pro Trp Arg Ser Thr Pro

463 1 5 10 15

467 Arg Thr Asp Val Leu Arg Leu Val Leu Tyr Leu Thr Phe Leu Gly Ala

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:19

Input Set : N:\Crf3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw

```

469          20          25          30
473 Pro Cys Tyr Ala Pro Ala Leu Pro Ser Cys Lys Glu Asp Glu Tyr Pro
475          35          40          45
479 Val Gly Ser Glu Cys Cys Pro Lys Cys Ser Pro Gly Tyr Arg Val Lys
481          50          55          60
485 Glu Ala Cys Gly Glu Leu Thr Gly Thr Val Cys Glu Pro Cys Pro Pro
487 65          70          75          80
491 Gly Thr Tyr Ile Ala His Leu Asn Gly Leu Ser Lys Cys Leu Gln Cys
493          85          90          95
497 Gln Met Cys Asp Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser
499          100          105          110
503 Arg Thr Glu Asn Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys Ile
505          115          120          125
509 Val Gln Asp Gly Asp His Cys Ala Ala Cys Arg Ala Tyr Ala Thr Ser
511          130          135          140
515 Ser Pro Gly Gln Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr
517 145          150          155          160
521 Leu Cys Gln Asn Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu
523          165          170          175
527 Glu Glu Cys Gln His Gln Thr Lys Cys Arg Ile His Lys Thr Val Ala
529          180          185          190
533 Pro Ser Thr Cys Ser Lys Pro Thr Cys Pro Pro Pro Glu Leu Leu Gly
535          195          200          205
539 Gly Pro Ser Val Phe Ile Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
541          210          215          220
545 Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln
547 225          230          235          240
551 Asp Asp Pro Glu Val Gln Phe Thr Trp Tyr Ile Asn Asn Glu Gln Val
553          245          250          255
557 Arg Thr Ala Arg Pro Pro Leu Arg Glu Gln Gln Phe Asn Ser Thr Ile
559          260          265          270
563 Arg Val Val Ser Thr Leu Pro Ile Thr His Gln Asp Trp Leu Arg Gly
565          275          280          285
569 Lys Glu Phe Lys Cys Lys Val His Asn Lys Ala Leu Pro Ala Pro Ile
571          290          295          300
575 Glu Lys Thr Ile Ser Lys Ala Arg Gly Gln Pro Leu Glu Pro Lys Val
577 305          310          315          320
581 Tyr Thr Met Gly Pro Pro Arg Glu Glu Leu Ser Ser Arg Ser Val Ser
583          325          330          335
587 Leu Thr Cys Met Ile Asn Gly Phe Tyr Pro Ser Asp Ile Ser Val Glu
589          340          345          350
593 Trp Glu Lys Asn Gly Lys Ala Glu Asp Asn Tyr Lys Thr Thr Pro Ala
595          355          360          365
599 Val Leu Asp Ser Asp Gly Ser Tyr Phe Leu Tyr Asn Lys Leu Ser Val
601          370          375          380
605 Pro Thr Ser Glu Trp Gln Arg Gly Asp Val Phe Thr Cys Ser Val Met
607 385          390          395          400
611 His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Ile Ser Arg Ser
613          405          410          415

```

VERIFICATION SUMMARY

DATE: 12/06/2001

PATENT APPLICATION: US/09/924,231

TIME: 12:20:20

Input Set : N:\Crf3\RULE60\09924231.txt

Output Set: N:\CRF3\12062001\I924231.raw